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ABSTRACT

This report responds to a congressional request to assess the availability of information on the extent to which the increasing burden of student debt affects: (1) students' choices about whether and where to enroll in college and whether or how much to borrow; (2) the length of time it takes to earn the baccalaureate degree and student choices regarding graduate school and employment; and (3) graduates' burden of repayment as reflected by the ability to save for retirement or invest in a home. A search of research studies and education databases, as well as interviews with representatives of the Department of Education and educational researchers, was conducted. Although the search identified 19 studies providing a general sense of some effects of the student debt burden, much of the information was dated or pertained to a limited population. Overall, the study was not able to identify current, comprehensive data or other information on the extent to which debt influences students' decisions concerning these areas. A table lists the limitations of the studies found and an enclosure summarizes each of the studies. (DB)

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The Honorable Carol Moseley-Braun
United States Senate

Subject: Student Loans: Limited Information Is Available to Determine How Students' College Debt Affects Their School and Lifestyle Decisions

Dear Senator Moseley-Braun:

For several decades students have incurred increasing debt to finance their postsecondary education; meanwhile, debt levels have surged following 1992 legislative changes. With the intention, in part, of expanding access to loans and providing additional aid to middle-income students, the Higher Education Amendments of 1992 increased both the maximum annual loan size and the total amount a student could borrow, and the amendments expanded eligibility for borrowing under the two major federal student loan programs authorized by the Higher Education Act of 1965, as amended.[1] The amendments also authorized new unsubsidized student loans for students whose family incomes were too high to qualify for the existing program.[2]

Since these changes, the median amount owed by college seniors who borrowed rose from $6,500 in school year 1992-93 to $10,900 in 1995-96, an average annual increase of 18.8 percent. This rise should be compared with the

[1]The Federal Family Education Loan Program (FFELP) provides loans from private lenders, insured against borrower default by state or nonprofit agencies and reinsured by the federal government; the William D. Ford Federal Direct Loan Program (FDLP) provides loans from the government through students' schools.

[2]The 1992 amendments added a program of unsubsidized loans. The government does not pay interest costs on these loans while a student is still in school, as it does for subsidized loans.

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average annual increase of 2 percent between school years 1986-87 and 1989-90, from $5,000 to $5,300.[3] This trend has engendered concern about how student debt may affect borrowers' behavior.

You asked us to assess the availability of information needed to determine how students' college debt has affected their enrollment and lifestyle decisions. In discussions with your office, we were asked to identify the availability of information on the extent to which students' debt or anticipated debt affected

- students' choices about whether and where to enroll in college or whether or how much to borrow in order to attend,
- the length of time it took baccalaureate graduates to earn their degree and their choices regarding graduate school and employment, and
- graduates' burden of repayment as reflected by their ability to save for retirement or invest in a home.

We based our study on an extensive search of research studies and education databases as well as interviews with representatives at the Department of Education and other researchers in the education community. Focusing on the questions you asked us to address, we selected studies based on the recency of their data or the comprehensiveness of their analysis. We conducted our study between October 1997 and February 1998 in accordance with generally accepted government auditing standards. Information from our separate study on the amount of debt students incur is not included here.[4]

In brief, our search did not identify current, comprehensive data or other information that would allow us to readily determine the extent to which debt influences students' decisions about whether and where to attend college (or whether or how much to borrow in order to attend), how long to take in completing a bachelor's degree program, whether or where to attend graduate school or what job to take, or how able they are as graduates to buy a house or save for retirement. While we identified 19 studies that provided a general sense of some of the effects of student debt burden, much of the information

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[3]These dollar numbers are not adjusted for inflation. In constant 1996 dollars, the change would be a decrease from $6,947 in 1987 to $6,448 in 1990, compared with an increase from $7,047 in 1993 to $10,900 in 1996.

[4]See Higher Education: Students' Have Increased Borrowing and Working to Help Pay Tuitions (GAO/HEHS-98-63, Feb. 18, 1998).

was dated or pertained to a limited population, or the studies did not control for the effects of other factors in such decisions (see the enclosure). Previous research has suggested, for example, that the debt aversiveness of low-income groups and certain minorities may tend to deter them from postsecondary enrollment. But one of the studies we reviewed suggested that the enrollment effects of income and ethnic differences may be much less than previously reported when college preparedness is considered. Nevertheless, from the studies we reviewed, the enrollment and lifestyle decisions of some students do seem to reflect college debt considerations.

Table 1 summarizes and shows relevant aspects of the 19 studies, such as

- All but four of the studies used data predating the July 1, 1993, effective date of the 1992 amendments that relaxed loan limits and eligibility criteria. It is possible that at today's higher borrowing levels, debt would have a larger effect on behavior.

- Seven studies used samples that were not nationally representative because their data were from samples limited either geographically or in terms of the caliber and resources of students. Their findings may not reflect the effect of debt in other parts of the country or on students at less selective or less expensive schools.

- Seven studies did not include detailed statistical analyses that would determine whether the reported effects were caused by debt-related factors or other factors, such as a student's academic preparation. Although several other studies did conduct such analysis and reported that factors other than debt level may be involved, none examined the effects on enrollment, career, or lifestyle decisions of debt incurred or anticipated by students who principally borrowed after the 1992 changes became effective.

Table 1: Limitations of the Studies We Identified

Study and date	Issues addressed	Limitations		
		Pre-1993 data	Limited sample	Limited analysis
1. Flint, 1998	Enrollment (borrowing); careers	X		
2. Baum and Saunders, 1998	Enrollment (borrowing); careers and graduate school; savings		X	X
3. Berkner and Chavez, 1997	Enrollment	X		
4. Scherschel and Behymer, 1997	Repayment burden			X
5. Choy and Geis, 1997	Career and graduate school	X		
6. Miller, 1997	Enrollment			X
7. Consortium on Financing Higher Education, 1996	Career and graduate school	X	X	
8. McCormick and Horn, 1996	Time to degree; graduate school	X		
9. The Education Research Institute and Institute for Higher Education Policy, 1995	Enrollment; savings			X
10. Kornhauser and Revesz, 1995	Career	X	X	
11. Consortium on Financing Higher Education, 1995	Savings; career and graduate school	X	X	
12. St. John, 1994	Career	X		
13. Weiler, 1994	Graduate school	X		

Study and date	Issues addressed	Limitations		
		Pre-1993 data	Limited sample	Limited analysis
14. Sommers and St. John, 1993	Enrollment	X	X	
15. Westat, 1993	Repayment burden	X		X
16. Fox, 1992	Graduate school	X		
17. Chambers, 1992	Career	X	X	
18. Saunders, 1991	Career; savings	X	X	X
19. Mortenson, 1990	Enrollment (borrowing)	X		X

Note: These studies are described in the enclosure.

Notwithstanding their limitations, the studies we reviewed showed that college debt has affected the behavior of some students. For example, the Baum and Saunders study reported that 21 percent of the vocational and technical students in its sample said they had significantly changed their career plans because of student loan debt, as did 16 percent of 4-year public school students, 17 percent of 4-year private school students, 15 percent of graduate school students, and 21 percent of professional school students. However, although the proportion of borrowers saying their student loan payment had caused them to delay purchasing a home had risen from 25 percent in a similar 1991 survey to 40 percent in 1996 (when other factors were controlled for), neither education debt levels nor education debt payment-to-incomes ratios had any effect on the likelihood of home ownership.

In the McCormick and Horn study, a Department of Education survey of 1992-93 bachelor's degree recipients one year after their graduation found that almost one-fourth of respondents who had ever considered applying to graduate school cited either their debt amount or insufficient financial resources as their reason for not applying. In Choy and Geis, the Department reported that students with college loans were less likely to attend graduate school within the year of receiving their degree than students without college debt.

While these studies show that students' college debt can affect their graduate school attendance, career plans, and home purchase, they also demonstrate the types of data shortcomings that prevent generalizing their results to today's graduates nationwide. The first study was based on students whose borrowing was concentrated principally in a few states, while the two other studies used data that predated the 1992 amendments and therefore did not reflect current, higher borrowing levels. The studies that did use more recent data did not provide information on how students' responses differed based on factors such as their academic record, which has been found to be associated with lower postsecondary enrollment rates of low-income high school graduates (Berkner and Chavez) and higher graduate school enrollment rates of students who had not planned to go to graduate school (Weiler). However, a more definitive understanding of the effects of student debt or anticipated debt on today's enrollment, career, and savings behavior would entail a more in-depth analysis of nationally representative data on students with post-1992 loans.

AGENCY COMMENTS

The Department of Education reviewed a draft of this correspondence and had no formal comments.

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We are sending copies of this correspondence to the Secretary of Education and will make it available to others who request a copy.

If you or your staff have any questions or wish to discuss this material further, please call me or Jay Eglin, Assistant Director, at (202) 512-7014. Major contributors included Susie Anschell and Charles M. Novak.

Sincerely yours,

Carlotta C. Joyner
Director, Education and
Employment Issues

Enclosure

SELECTIVE INFORMATION ON 19 STUDIES ON IDENTIFIED STUDENT DEBT BURDEN

The following summarizes the 19 studies listed in table 1. The studies are listed by number and in the same order as in table 1–that is, from most recent to oldest.

STUDY NUMBER 1

Thomas A. Flint, "The Influence of Job Prospects on Student Debt Levels of Traditional and Adult Undergraduates," forthcoming in NASFAA Journal of Student Financial Aid, spring 1998.

Type of Analysis

The study examined whether students' borrowing reflected their income and anticipated career and earnings prospects. The analysis included applying regression procedures to data on 2,818 students from the Department of Education's 1990 National Postsecondary Student Aid Study (NPSAS) and using occupational data from the Department of Labor's Bureau of Labor Statistics (BLS) and starting-salary data from the National Association of Colleges and Employers (formerly the College Placement Council). Among factors considered in the analysis were demographic variables such as family income; enrollment variables such as academic characteristics and tuition and other institutional factors; psychological and behavioral factors, including cost avoidance and work while in school; and employment variables such as job availability and starting-salary data.

Findings

Dependent and independent students differed substantially in their attitudes toward loans and debt levels.[5] Dependent students were less likely to borrow if they came from high-income families. For dependent students who did borrow, cost and other institutional measures were statistically significant predictors of how much they borrowed, but family income showed only marginal effect. For independent students, however, the amount they borrowed was statistically related to their income level although their willingness to borrow was not associated with their income. In particular, independent students borrowed least if their income was less than $5,000 and most if their income was more than $30,000.

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[5]The Department defines independent students as those who are at least 24 years old, are married, are graduate or professional students, have legal dependents other than a spouse, are orphaned or wards of the court, or are veterans. Dependent students are those who have access to parental support.

There was not a significant relationship between job prospects and either dependent or independent students' willingness to borrow, after controlling for other factors, such as type of institution and cost of attendance. That is, students aspiring to achieve easily accessible or highly remunerative careers were no more willing to borrow than those aspiring to enter careers with relatively poorer financial prospects. Among independent students who did borrow, however, larger debts were associated with higher-status (although not with higher starting-salary) jobs and were marginally associated with aspirations toward higher degrees and greater congruence between academic major and expected career.

Limitations

The study's data were dated; NPSAS data were from 1990 and BLS data were from 1992.

STUDY NUMBER 2

Sandy Baum and Diane Saunders, Life After Debt: Results of the National Student Loan Survey (Braintree, Mass.: Nellie Mae, February 1998).

Type of Analysis

This study reported on 1,098 responses to a questionnaire mailed in 1997 to 2,550 student borrowers whose loans Nellie Mae (a major nonprofit provider of education loan funds) owned. Respondents were student borrowers who began repaying their loans between 1993 and 1996 and whose loans were originally made by lenders in primarily Massachusetts, New York, and California.

Findings

Of all students who borrowed to pay for their undergraduate tuition, 39 percent said that their concern about borrowing was extremely or very important in preventing them from attending a more expensive school, but one-third said borrowing was not an important factor. Of students who did not complete their degrees, 50 percent said that their debt was extremely or very important in preventing them from staying in school, but 30 percent said it was not important, and there was no significant correlation between debt levels and the importance attributed to loans in preventing students from remaining in school. Among students who did not complete a degree, nonwhite students were significantly more likely than white students (70 percent compared with 43 percent) to say that loans had prevented them from staying in school.

Groups of students differed significantly in the extent to which they attributed career and graduate-school decisions to indebtedness. For example, Pell grant recipients were

more likely than other baccalaureate students (50 percent compared with 38 percent) to say their undergraduate debt had prevented them from attending graduate school. And although 17 percent of respondents said they had significantly changed their career plans because of their debt, a larger proportion of respondents attending vocational, technical, and professional schools such as medical, law, and business schools said that they changed their plans because of their debt (21 percent of respondents for each population).

Having college debt was reported to delay home purchases for an increasing proportion of graduates. The proportion of borrowers who stated that student loan payments had caused them to delay purchasing a home increased from 25 percent in 1991 to 40 percent in 1996. However, the researchers reported that when other factors were controlled for, "Neither education debt levels nor payment-to-income ratios have any effect on the probability that borrowers own homes." The survey also reported that the median share of respondents' income used to repay debt was 8 percent. For 13 percent of borrowers, however, debt repayment commanded more than 20 percent of their income.

Limitations

Respondents were concentrated in a limited number of states, and the study results did not tell how responses reflected differences in academic preparation or family background among persons in different response categories.

STUDY NUMBER 3

Lutz Berkner and Lisa Chavez, Access to Postsecondary Education for the 1992 High School Graduates, NCES 98-105 (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics (NCES), October 1997).

Type of Analysis

This was a comprehensive analysis of responses to a 6-year survey of 1992 high school graduates sponsored by NCES. The study began with a 1988 base-year national sample of 25,000. One aspect of the analysis focused on the extent to which college costs and financial aid availability account for differences in the college enrollment rates of those students who were qualified for college and took the steps necessary to enroll (such as taking standardized tests).

Findings

Hispanic, black, and low-income high school graduates had a relatively low enrollment rate at 4-year colleges. But after accounting for the effects of various measures of

preparation, the study found that financial considerations did not account for students' enrollment decisions. That is, when researchers looked only at students whose qualification for college was based on achievement measures such as standardized test scores and high school grade point averages and who had taken the steps required in the college application process, members of disadvantaged groups were no less likely than middle-income students to enroll in college or less willing to incur debt for college. However, Hispanic students were less likely than other students to take the required steps. For those who were accepted at private colleges, proportions enrolling instead at public 4-year colleges did not differ because of race, ethnicity, or income level.

Limitations

The most recent data were from 1994.

STUDY NUMBER 4

Patricia Scherschel and Paul Behymer, Reality Bites: How Much Do Students Owe? (Indianapolis, Ind.: USA Group, Fall 1997).

Type of Analysis

This study analyzed data on more than 250,000 Stafford loan borrowers who left school in 1995 through 1997 and whose loans were serviced by USA Group (a large FFELP guaranty agency, secondary market lender, and loan servicer). Although the principal emphasis was on the amounts students were borrowing, the study also analyzed the prevalence of loan repayment under alternatives to FFELP's standard repayment plan.

Findings

Of borrowers who consolidated their loans between July 1, 1996, and June 30, 1997, 83 percent chose the standard level-payment option (generally over 10 years). Only 16.23 percent chose graduated repayment (payments gradually increasing over time), and 0.37 percent chose income-sensitive payment. The number of borrowers selecting plans that offered lower monthly payment and the relatively high average balances being repaid under the graduated (average loan balance of $79,850) and income-sensitive (average balance of $31,584) payment plans, compared with the standard repayment plan (average

balance of $18,131)–together with a marked increase in delinquency rates–suggested to the authors that borrowers were seeking payment relief.[6]

Limitations

This study, whose main focus was tangential to the questions we were addressing, did not break down responses to provide information on demographic or other differences among persons with different levels of cumulative debt.

STUDY NUMBER 5

Susan P. Choy and Sonya Geis, Early Labor Force Experiences and Debt Burden, NCES 97-286 (Washington, D.C.: NCES, August 1997).

Type of Analysis

This report was based on the Department's 1992-93 Baccalaureate & Beyond (data on 10,800 college graduates) and Beginning Postsecondary Students (approximately 7,280 respondents) surveys. It covered students who either received a bachelor's degree in 1992-93 or began their postsecondary education in 1989-90 and were last enrolled in college in December 1992. The study analyzed the effect that debt had on obtaining further education, on career choice, and on lifestyle.

Findings

Students who had debt were less likely to be in graduate school 1 year after their baccalaureate graduation than students who did not borrow, and there was an inverse relationship between students' cumulative debt and the proportion who said that their debt was the main reason for not enrolling in graduate school during the year after graduation. In contrast, the immediate career choices of bachelor's degree students were not related to whether they had loans: Of those who had jobs unrelated to their degree, borrowers were no more likely to take a job for financial reasons than were nonborrowers. But the study did find limited evidence that career choice was related to borrowing among students not pursuing baccalaureate degrees.

Among bachelor's degree borrowers who were working full time upon leaving college, respondents' saving to purchase a home or for retirement did not seem to be related to

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[6]The USA Group study does not include loans made or consolidated under FDLP. As of March 1997, about 9 percent of FDLP borrowers in repayment were using income contingent repayment.

the share of their income going to loan payments. However, almost a third of respondents without debt reported saving for a home compared with just over a quarter of students who owed more than $10,000, and the two groups differed even more in percentage of respondents saving for retirement. The survey did not provide information on amounts saved. The study did find that students with more than 15 percent–compared with those with 5 percent or less–of their income going to repay their education loans were more likely to be saving for further education and to be living with parents or relatives.

Limitations

Data were from 1992-93.

STUDY NUMBER 6

Elizabeth I. Miller, "Parents' Views on the Value of College and How They Will Pay for It," Journal of Student Financial Aid, Vol. 27, No. 1 (Winter 1997).

Type of Analysis

This study analyzed responses to a May 1996 survey, commissioned by the Student Loan Marketing Association (Sallie Mae), of parents of traditional college-age students using a randomly generated sample of U.S. households. The analysis compared parents whose children were attending college in 1996 with those whose children had the more distant prospect of enrolling in 1997-99.

Findings

Of parents whose students started school in 1996, 37 percent thought it very unlikely their child would consider or had considered selecting a second-choice school "because it is less expensive" and 43 percent "because their financial aid awards makes it less expensive." Moreover, it seemed that the likelihood of parents' considering having their children attend a second-choice school decreased when the time came to select a school: A considerably smaller proportion of 1996 starters' parents (15 percentage points smaller proportion than that of 1997-99 starters) said their children were likely to attend a second-choice school because of cost. Yet, a significantly smaller percentage of 1996 starters' parents (whose children were attending college) expected to use grants or scholarships to pay for that education, and the two groups did not differ significantly with respect to expected dependence on loans or savings.

Limitations

The study did not attempt to break down responses to provide information on demographic or other differences among persons in different response categories.

STUDY NUMBER 7

Consortium on Financing Higher Education, A Visit With the Class of '94 (Cambridge, Mass.: August 1996). Proprietary and confidential information, used with permission of the consortium.

Type of Analysis

This study analyzed 15,262 survey responses from students who, in school year 1994, were seniors at 27 highly selective, high-tuition colleges.

Findings

A sizable proportion of respondents cited their college debt as an influence on their career or lifestyle decisions. At least half the students who had student loans said that their debt was causing them to work immediately after graduation. In addition, about a third of the respondents said that their loans restricted their choice of which graduate school to attend, caused them to postpone enrolling in graduate school, or limited their job search to fields that paid well.

Limitations

The sample was not representative of U.S. postsecondary students, and data were for the class of 1994. The sampled students' debt and choices largely predated the effect of changes enacted in the 1992 amendments.

STUDY NUMBER 8

Alexander C. McCormick and Laura J. Horn, A Descriptive Summary of 1992-93 Bachelor's Degree Recipients 1 Year Later, NCES 96-158 (Washington, D.C.: NCES, August 1996).

Type of Analysis

This survey used a nationally representative sample of 10,080 students who had completed their bachelor's degrees in academic year 1992-93. These students were interviewed (1) in their last year of college and asked about the time they had taken to

complete their undergraduate degree and (2) 1 year later and asked about their activities in the year after graduation.

Findings

Among students who did not interrupt their undergraduate studies for 6 months or more, those with between $1,000 and $20,000 of debt were less likely than nonborrowers to take 4 years or less to complete their undergraduate degree. But students with less than $1,000 or more than $20,000 of debt did not differ from nonborrowers with respect to time taken to complete their degree. Among graduates surveyed, approximately 10 percent of those who had considered applying to graduate school cited excessively large debt or insufficient financial aid as their principal reason for not applying, and another 14 percent said they could not afford to go to graduate school. Percentages were higher for black and Hispanic students, of whom 12.5 and 14.8 percent, respectively, cited undergraduate debt as their principal reason for not applying to graduate school. Percentages were lower for non-Hispanic white students (9.8 percent). Sixteen percent of black students and 14.9 percent of Hispanics cited excessively high costs as their principal reason for not applying to graduate school, compared with 13.5 percent of non-Hispanic white students.

Limitations

The study used data on 1992-93 college graduates.

STUDY NUMBER 9

The Education Resource Institute and Institute for Higher Education Policy, College Debt and the American Family (September 1995).

Type of Analysis

This study used data from a joint nationally representative survey of undergraduate students in the student loan program in July 1995, constituting 373 students, and some of their parents, drawn from a database of about 5.5 million students at more than 1,100 public and private schools in 45 states.

Findings

Twenty percent of respondents considered leaving school because of the prospect of debt, and 17 percent said the prospect of increasing debt had caused them to reduce their course load. Sixty-two percent of respondents anticipated that because of college

debt, they would have to forego major purchases. Of these, 24 percent anticipated having to forego buying a home.

Limitations

The study did not attempt to break down responses to provide information on demographic or other differences among persons in different response categories.

STUDY NUMBER 10

Lewis A. Kornhauser and Richard L Revesz, "Legal Education and Entry into the Legal Profession: The Role of Race, Gender, and Educational Debt," New York University Law Review, Vol. 70 (October 1995), p. 829.

Type of Analysis

This study used regression-related procedures to analyze the records and survey responses of students who had attended law school at New York University (NYU) and the University of Michigan in the 1980s. Cumulative debt data for the responding 1,370 NYU law graduates did not include the debt they incurred before graduate school, but data on the responding 1,445 Michigan law graduates included their undergraduate loans. In addition to demographic and academic performance factors, the study examined students' career plans or inclinations when they entered law school.

Findings

Among NYU law students, attorneys' first job choice was significantly related to debt burden only for female black and Latino students. Among Michigan law students, debt burden related to job choice among women as a whole. Both NYU black and Latino women and Michigan women with higher law school debt were less likely than other students to take a job in the nonprofit sector. With this exception, however, law school debt did not have a significant effect on attorneys' first job choice. But the authors said that the effect of debt levels on career choices may be greater now because of such factors as the rise in debt burdens and the growth in salary disparity between the not-for-profit and for-profit sectors.

Limitations

Groups surveyed were limited to students receiving law degrees in the 1980s at two law schools.

STUDY NUMBER 11

Consortium on Financing Higher Education, The Class of 1982: The First Decade (Cambridge, Mass.: August 1995). Proprietary and confidential information, used with permission of the consortium.

Type of Analysis

This report analyzed 7,491 responses to a survey of students who were members of the 1982 senior classes at 20 highly selective high- tuition schools and who were interviewed in 1993. The analysis examined the relationship between graduate school attendance and having borrowed as an undergraduate, and it took into account family income in analyzing the effect of college debt on students' decisions about savings and having a home mortgage.

Findings

Alumni who did not borrow were no more likely than those with student loans to obtain an advanced degree. And among those who did borrow, the probability of obtaining an advanced degree was not related to the amount of debt. Respondents had mortgages at the same rate and had similar savings behavior, regardless of whether they had or had not borrowed for college. However, former students with higher cumulative graduate and undergraduate education debt (particularly those with education debt of more than $30,000) were less likely to have borrowed to buy a house even after taking into account that higher-income households were more likely to have mortgages. Similarly, those with total education debt exceeding $50,000 were less likely to have saved (64 percent of persons with more than $50,000 education debt had saved compared with 90 percent of persons with lower loan balances), and the negative relationship of total debt with savings was not explained by the shorter time holders of larger loan debt had spent in the labor force.

Limitations

The study's sample was not representative of U.S. postsecondary students, and data on cumulative debt were from the early 1980s.

STUDY NUMBER 12

Edward P. St. John, "The Influence of Debt on Choice of Major," Journal of Student Financial Aid, Vol. 24, No. 1 (1994).

Type of Analysis

This study used regression procedures to identify factors that were significantly related to students' choice of a major. Data on the relevant factors were derived from the 3,893 responses to the 1985 follow-up survey of the High School and Beyond 1980 senior cohort that had sufficient information on the variables under examination. Majors were ranked according to their mean earnings in 1979, as a measure of students' expected earnings, using data from the 1980 follow-up of the NCES National Longitudinal Survey of the high school class of 1972. In addition to debt burden, the analysis included demographic factors, type of high school program, high school and college grades, and type of college.

Findings

When other potentially influential factors were controlled for, cumulative debt did not statistically affect choice of academic major with high expected earnings. Rather, the choice was more likely to relate to such characteristics as having high grades in high school and in college, having a high family income, not having attended a private college, and not having a highly educated mother.

Limitations

The study used data from the 1970s and 1980s.

STUDY NUMBER 13

William C. Weiler, "Expectations, Undergraduate Debt and the Decision to Attend Graduate School: A Simultaneous Model of Student Choice," Economics of Education Review, Vol. 13, No. 1 (1994).

Type of Analysis

This study analyzed data from the Department's 1984 and 1986 follow-ups to the 1980 High School and Beyond survey of 1980 high school seniors, including only the 1,724 who entered college by the fall of 1980 and had graduated from a 4-year institution in 1984 or 1985, in time for the 1986 follow-up. The study used a model that assumed that investment in higher education occurs in discrete stages, at each of which students learn more about the costs and payoffs of additional education.

Findings

An increase in educational debt expected as an undergraduate significantly reduced the likelihood that a student would expect to enroll in graduate school. Such differences might occur, for example, if students' original expectations had been incorrect or if they gained new information regarding their interests or ability. But unexpected differences between actual and expected debt did not significantly relate to differences between expected and actual college enrollment.

Limitations

The study used data from the mid-1980s.

STUDY NUMBER 14

Patricia A. Sommers and Edward P. St. John, "Assessing the Impact of Financial Aid Offers on Enrollment Decisions," Journal of Student Financial Aid, Vol. 23, No. 3 (Fall 1993).

Type of Analysis

This analysis used logistic regression analysis of data on first-time enrollment applicants who were accepted in 1989 at an urban, public, primarily commuter school to identify the types of student aid that related to students' enrollment decisions.

Findings

Students' enrollment decisions were not significantly related to receiving loans, grants, or work study. Only scholarships were significantly associated with first-time attendance.

Limitations

The study's sample was not representative of U.S. postsecondary students, and data were from the late 1980s.

STUDY NUMBER 15

Westat, Inc., Debt Burden: The Next Generation, ED/OPP 93-46 (Washington, D.C.: Department of Education, September 1993).

Type of Analysis

This study analyzed college debt and first-year income data for a nationally representative sample of 1990 college graduates in the 1991 NCES Recent College Graduate Survey. Respondents were not enrolled in postsecondary education at the time of the survey.

Findings

The vast majority of graduates did carry excessive debt burden. Median debt for those with debt was 4.7 percent of gross income. But 8.3 percent of graduates–up from 6.5 percent in 1986–had debt burden in excess of 10 percent. These were mostly persons who had attended private schools, among whom the percentage with debt burden above 10 percent increased from 9.2 percent in 1986 to 13 percent in 1990. Another group with relatively high debt burden was graduates with salaries of less than $10,000, whose median first-year debt burden was 14.6 percent. In addition, 4 percent of students with debt had no income, but one-fifth of these were enrolled in school and their loans were, according to the authors, probably in deferment.

Limitations

The study used 1990 cumulative debt and income data, and–except for income, gender, and marital status–did not attempt to break down responses to provide information on demographic or other differences among persons in different response categories.

STUDY NUMBER 16

Marc Fox, "Student Debt and Enrollment in Graduate and Professional School," Applied Economics, Vol. 24, No. 7 (July 1992).

Type of Analysis

This study analyzed data on approximately 12,000 bachelor's degree recipients, from the Department of Education's Survey of 1985-86 College Graduates, a representative national sample consisting of approximately 16,000 bachelor's and 2,000 master's degree recipients 1 year after graduation, to identify the relationship between students' cumulative debt and their decisions to enroll in postbaccalaureate programs.

Findings

A $10,000 increase in the mean level of men's undergraduate borrowing would have had insignificant effect on men's enrollment in graduate or professional schools (GPS). But

such an increase in women's undergraduate borrowing would have decreased their GPS enrollment by 11 percent, and a $20,000 increase would have reduced women's GPS enrollment by 20 percent. However, since fewer than 7 percent of the women sampled had debt more than $10,000 above the sample mean, concern that debt would reduce GPS enrollment was unwarranted. In addition, for the sample as a whole, an increase in undergraduate debt would have led to an enrollment shift toward doctoral study and away from other forms of postbaccalaureate training.

Limitations

The study used 1980s data.

STUDY NUMBER 17

David L. Chambers, "The Burdens of Educational Loans: The Impacts of Debt on Job Choice and Standards of Living for Students at Nine American Law Schools," Journal of Legal Education, Vol. 42, No. 2 (June 1992).

Type of Analysis

This study analyzed data from 1,253 responses to an April 1989 survey of the graduating class of 1989 at three public and six private, well-established law schools to determine the relationship of their cumulative debt to job choice.

Findings

Controlling for other factors such as gender, race, and the education caliber of students, the likelihood of taking a job with a large firm (rather than a small private firm or a nonprofit or public sector employer) increased slightly as total student debt (undergraduate through law school) increased. The relationship was strongest for students in the top quarter of their class and did not hold for students in the lower half of the class.

Limitations

The study used 1980s data.

STUDY NUMBER 18

Diane Saunders, The New England Student Loan Survey II (Boston, Mass.: Massachusetts Higher Education Assistance Computation and Nellie Mae, March, 1991).

Type of Analysis

This study analyzed the survey responses of 1,442 recent New England borrowers in 1988 and 1991 to determine the effects of students' loan debt on their career plans, including moving out of their parents' home, purchasing a home, purchasing a car, getting married, or having children.

Findings

About 15 percent of borrowers changed their careers in 1991 because of their student loans, compared with 11 percent in 1988. Of borrowers responding in 1991, 29 percent owned a home–compared with 19 percent in 1988, when Nellie Mae conducted a similar survey. Although monthly payments had more effect on consumption patterns than did total debt, borrowers with relatively high payments were not more or less likely to own homes. Nevertheless, borrowers with greater debt were most likely to think their education debt influenced their home-purchasing and other lifestyle decisions.

Limitations

Loans were made in the 1980s and concentrated among lenders in a limited number of states. Also, the study did not attempt to break down responses to provide information on demographic or other differences among persons in different response categories.

STUDY NUMBER 19

Thomas G. Mortenson, The Impact of Increased Loan Utilization Among Low Family Income Students (Iowa City, Iowa: American College Testing Program, 1990).

Type of Analysis

Synthesized data principally for the 1970s and 1980s from the Federal Reserve Board's Consumer Finance Survey, the Pennsylvania Higher Education Assistance Agency (PHEAA), the Bureau of Census' Current Population Survey (CPS), the University of California at Los Angeles/American Council on Education Freshmen Survey, the College Board, and other sources to identify factors related to levels of student indebtedness and the characteristics of respondents willing to borrow for education and other purposes. These surveys varied considerably in scope, ranging, for example, from CPS, which interviews about 48,000 households each month, to PHEAA's approximately 2,257 survey responses.

Findings

Following substitution of loans for grants after the late 1970s, low-income students' enrollment gains of the 1960s and 1970s were eroded by between 40 and 50 percent in the 1980s. Low-income students who did enroll tended to move to lower-cost schools and to have the greatest growth in indebtedness. Low-income students saw a greater risk in borrowing because they tended to have lower high school grades and, therefore, approached higher education with lower probability of graduating and earning the increased income to be able to repay their student loans. This element of higher risk was reflected in low-income respondents' lower assessment of the value of a college education. Loans increase students' costs by adding fees and interest charges, thus increasing the risk of the investment and reducing the net benefits of college for borrowers. In addition, the poor are less willing than others to take on debt for any purpose or to incur investment risk.

Limitations

Study data were from the 1970s and 1980s or earlier, and the focus was principally on borrowing rather than on enrollment decisions.

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